

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Sheet	1	of	6	Application Number	5407766 14600002
				Filing Date	12-30-04
				First Named Inventor	Woonza M. RHEE et al.
				Art Unit	14600002
				Examiner Name	C. Rosenthal
				Attorney Docket Number	2500-2287.06

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Document No.	Issue Date or Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
CR	AA	3,619,371	11/1971	Crook et al.			
	AB	3,742,955	7/1973	Battista et al.			
	AC	3,788,948	1/1974	Kegadal et al.			
	AD	3,810,473	5/1974	Cruz, Jr. et al.			
	AE	3,876,501	4/1975	Hanuschewsky			
	AF	3,949,073	4/1976	Daniels et al.			
	AG	3,960,830	6/1976	Bayer et al.			
	AH	4,002,531	1/1977	Royer			
	AI	4,055,635	10/1977	Green et al.			
	AJ	4,088,538	5/1978	Schneider			
	AK	4,101,380	7/1978	Rubinstein et al.			
	AL	4,164,559	8/1979	Miyata et al.			
	AM	4,179,337	12/1979	Davis et al.			
	AN	4,192,021	3/1980	Deibig et al.			
	AO	4,237,229	12/2/80	Hartdegen et al.			
	AP	4,238,480	12/1980	Sawyer			
	AQ	4,261,973	4/1981	Lee et al.			
	AR	4,279,812	7/1981	Cioca			
	AS	4,301,144	11/1981	Iwashita et al.			
	AT	4,314,380	2/1982	Miyata			
	AU	4,320,201	3/1982	Berg et al.			
	AV	4,357,274	11/1982	Werner			
	AW	4,390,519	6/1983	Sawyer			
	AX	4,404,970	9/1983	Sawyer			
	AY	4,412,947	11/1983	Cioca			
	AZ	4,412,989	11/1983	Iwashita			
	BA	4,414,147	11/1983	Klibanov et al.			
	BB	4,415,628	11/1983	Cioca et al.			
	BC	4,415,665	11/1983	Mosbach et al.			
	BD	4,424,208	1/1984	Wallace et al.			
	BE	4,451,568	5/1984	Sneider et al.			
	BF	4,488,911	12/1984	Luck et al.			
	BG	4,495,285	1/1985	Shimizu et al.			
	BH	4,496,689	1/1985	Mitra			
	BI	4,515,637	5/1985	Cioca			
	BJ	4,544,516	10/1985	Hughes et al.			
	BK	4,553,974	11/1985	Dewanjee			
	BL	4,557,764	12/1985	Chu			
	BM	4,563,350	1/1986	Nathan et al.			
	BN	4,563,351	1/1986	Nathan et al.			
	BO	4,563,490	1/1986	Stol et al.			
	BP	4,578,067	3/1986	Cruz, Jr.			
	BQ	4,582,640	4/1986	Smestad et al.			

Examiner Signature	<i>C. Rosenthal</i>	Date Considered	12-30-04
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

Application Number	101766146
Filing Date	11-27-04
First Named Inventor	Woonza M. RHEE et al.
Art Unit	1615
Examiner Name	C. Rosenthal
Attorney Docket Number	2500-2287.06

Sheet 2 of 6

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Document No.	Issue Date or Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
CR	BR	4,592,864	6/1986	Miyata et al.			
	BS	4,600,533	7/1986	Chu			
	BT	4,642,117	2/1987	Nguyen			
	BU	4,655,980	4/1987	Chu			
	BV	4,670,417	6/1987	Iwasaki et al.			
	BW	4,678,468	7/1987	Hiroyoshi			
	BX	4,687,820	8/1987	Hou et al.			
	BY	4,689,399	8/1987	Chu			
	BZ	4,703,108	10/1987	Silver et al.			
	CA	4,704,131	11/1987	Noishiki et al.			
	CB	4,725,671	2/1988	Chu et al.			
	CC	4,732,863	3/1988	Tomasi			
	CD	4,737,544	4/1988	McCain et al.			
	CE	4,745,180	5/1988	Moreland et al.			
	CF	4,766,106	8/1988	Katre			
	CG	4,774,227	9/1988	Piez et al.			
	CH	4,789,663	12/1988	Wallace et al.			
	CI	4,795,467	1/1989	Piez et al.			
	CJ	4,828,563	5/1989	Müller-Lierheim			
	CK	4,847,325	7/1989	Shadle et al.			
	CL	4,851,513	7/1989	Devore et al.			
	CM	4,886,866	12/12/89	Braatz et al.			
	CN	4,935,465	6/1990	Garman			
	CO	4,950,483	8/1990	Ksander			
	CP	4,950,699	8/1990	Holman			
	CQ	4,973,493	11/1990	Guire			
	CR	4,979,959	12/1990	Guire			
	CS	4,980,403	12/1990	Bateman et al.			
	CT	4,983,580	1/1991	Gibson			
	CU	5,024,742	6/1991	Nesburn et al.			
	CV	5,108,957	4/1992	Kelman et al.			
	CW	5,122,614	6/1992	Zalipsky			
	CX	5,141,747	8/1992	Scholz			
	CY	5,156,613	10/1992	Sawyer			
	CZ	5,162,430	11/1992	Rhee et al.			
	DA	5,167,960	12/1992	Ito et al.			
	DB	5,169,754	12/1992	Siiman et al.			
	DC	5,192,316	3/1993	Ting			
	DD	5,198,493	3/1993	Holmberg et al.			
	DE	5,201,764	4/1993	Kelman et al.			
	DF	5,209,776	5/1993	Bass et al.			
	DG	5,219,564	6/1993	Zalipsky et al.			
✓	DH	5,219,895	6/1993	Kelman et al.			

Examiner Signature	<i>C. Rosenthal</i>	Date Considered	12-30-04
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Substitution for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			<i>Complete if Known</i>	
			Application Number	C/O/O/T Co., Ltd. WA-001354,762
Sheet 3 of 6			Filing Date	Filed 02/27/04
			First Named Inventor	Woonza M. RHEE et al.
			Art Unit	UIC/1502
			Examiner Name	Wm. ROSENTHAL
			Attorney Docket Number	2500-2287.06

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Document No.	Issue Date or Publication Date	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
CR	DI	5,264,214	11/1993	Rhee et al.			
	DJ	5,290,552	3/1994	Sierra et al.			
	DK	5,292,802	3/1994	Rhee et al.			
	DL	5,298,643	3/1994	Greenwald			
	DM	5,304,595	4/1994	Rhee et al.			
	DN	5,306,500	4/1994	Rhee et al.			
	DO	5,308,889	5/1994	Rhee et al.			
	DP	5,321,095	6/1994	Greenwald			
	DQ	5,324,775	6/1994	Rhee et al.			
	DR	5,324,844	6/1994	Zalipsky			
	DS	5,328,955	7/1994	Rhee et al.			
	DT	5,349,001	9/1994	Greenwald et al.			
	DU	5,354,336	10/1994	Kelman et al.			
	DV	5,364,622	11/1994	Franz et al.			
	DW	5,405,877	4/1995	Greenwald et al.			
	DX	5,410,016	4/1995	Hubbell et al.			
	DY	5,428,022	6/1995	Palefsky et al.			
	DZ	5,455,027	10/1995	Zalipsky et al.			
	EA	5,475,052	12/1995	Rhee et al.			
	EB	5,510,418	4/1996	Rhee et al.			
	EC	5,514,379	5/1996	Weissleder et al.			
	ED	5,549,904	8/1996	Juergensen et al.			
	EE	5,565,519	10/1996	Rhee et al.			
	FE	5,567,422	10/1996	Greenwald			
	EG	5,580,923	12/1996	Yeung et al.			
	EH	5,605,976	2/1997	Martinez et al.			
	EI	5,612,460	3/1997	Zalipsky			
	EJ	5,614,549	3/1997	Greenwald et al.			
	EK	5,614,587	3/1997	Rhee et al.			
	EL	5,626,863	5/1997	Hubbell et al.			
	EM	5,637,749	6/1997	Greenwald			
	EN	5,643,464	7/1997	Rhee et al.			
	EO	5,643,575	7/1997	Martinez et al.			
	EP	5,700,848	12/1997	Soon-Shiong et al.			
	EQ	5,752,974	5/1998	Rhee et al.			
	ER	5,874,500	2/1999	Rhee et al.			
	ES	6,051,648	4/00	Rhee et al.			

Examiner Signature		Date Considered	12-30-04
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	50/1766146	
			Filing Date	1-27-04	
			First Named Inventor	Woonza M. RHEE et al.	
			Art Unit	1615	
			Examiner Name	C. Rosenthal	
Sheet	4	of	6	Attorney Docket Number	2500-2287.06

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document No.	Publication Date	Country	Class	Subclass	T
CR	ET	CA 2134744	5/1995	Canada			
	EU	EP 0013249	1/1980	Europe			
	EV	EP 0042253	12/1981	Europe			
	EW	EP 0154447	9/1985	Europe			
	EX	EP 0157359	10/1985	Europe			
	EY	EP 0171176	2/1986	Europe			
	EZ	EP 0243179	10/1987	Europe			
	FA	EP 0330389	8/1989	Europe			
	FB	EP 0341007	11/1989	Europe			
	FC	EP 0431479A1	6/1991	Europe			
	FD	EP 0466383	1/1992	Europe			
	FE	EP 0575273	12/1993	Europe			
	FF	EP 0640647	3/1995	Europe			
	FG	EP 0656214	6/1995	Europe			
	FH	EP 0656215	6/1995	Europe			
	FI	EP 0680990	11/1995	Europe			
	FJ	EP 0732109	9/1996	Europe			
	FK	FR 2628634	9/1989	France			
	FL	JP 4-227265	4/1990	Japan			
	FM	JP 60-70972	3/1994	Japan			
	FN	JP 07-090241	4/1995	Japan			
	FO	WO 84/01106	3/1984	PCT WO			
	FP	WO 85/04412	10/1985	PCT WO			
	FQ	WO 87/04078	7/1987	PCT WO			
	FR	WO 90/05755	5/1990	PCT WO			
	FS	WO 92/13025	8/1992	PCT WO			
	FT	WO 92/13578	8/1992	PCT WO			
	FU	WO 94/01483	1/1994	PCT WO			
	FV	WO 94/03155	2/1994	PCT WO			
↓	FW	GB 1059455	2/22/67	United Kingdom			

OTHER DOCUMENTS — NONPATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), Title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T
CR	FX	Poly(Ethylene Glycol) Chemistry: Biotechnical & Biomedical Applications, Chapter 22, J. Milton Harris, Ed., Plenum Press, NY (1992).		
↓	FY	Abuchowski et al. (1977), "Alteration of immunological properties of bovine serum albumin by covalent attachment of polyethylene glycol," <i>Biol. Chem.</i> 252(11):3578-3581.		
↓	FZ	Abuchowski et al. (1984), "Cancer therapy with chemically modified enzymes. I. Antitumor properties of polyethylene glycol-asparaginase conjugates," <i>Cancer Biochem. Biophys.</i> 7:175-186.		
↓	GA	Abuchowski et al. (1977), "Effect of covalent attachment of polyethylene glycol on immunogenicity and circulating life of bovine liver catalase," <i>J. Biol. Chem.</i> 252(11):3582-3586.		

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**


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**Complete if Known**

Sheet	5	of	6	Application Number	10/766-146
				Filing Date	1-27-04
				First Named Inventor	Woonza M. RHEE et al.
				Art Unit	1615
				Examiner Name	C. Rosenthal
				Attorney Docket Number	2500-2287.06

**OTHER DOCUMENTS — NONPATENT LITERATURE DOCUMENTS**

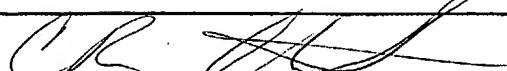
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), Title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
CR	GB	Anderson et al. (1964), "The use of esters of n-hydroxysuccinimide in peptide synthesis," [???] 86:1839-1842.	
	GC	Beauchamp et al. (1983), "A new procedure for the synthesis of polyethylene glycol-protein adducts: Effects on fuction, receptor recognition, and clearance of superoxide dismutase, lactoferrin, and a <sub>2</sub> -macroglobulin," <i>Analytical Biochemistry</i> 131:25-33.	
	GD	Bendich et al. (1982), "Immunological effects of native and polyethylene glycol-modified asparaginases from <i>Vibro succinogenes</i> and <i>Escherichia coli</i> in normal and tumor-bearing mice," <i>Clin. Exp. Immunol.</i> 48:273-278.	
	GE	Braatz et al. (1992), "A New Hydrophilic Polymer for Biomaterial Coatings with Low Protein Adsorption," <i>J. Biomater. Sci. Polymer Edn.</i> 3(6):451-462.	
	GF	Chen et al. (1981), "Properties of two urate oxidases modified by the covalent attachment of poly(ethylene glycol)," <i>Biochem. Biophys. Acta.</i> 660:293-298.	
	GG	Chvapil et al. (1969), "Some chemical and biological characteristics of a new collagen-polymer compound material," <i>J. Biomed. Mater. Res.</i> 3:315-332.	
	GH	Davis et al. (1981), "Hypouricaemic effect of polyethyleneglycol modified urate oxidase," <i>Lancet</i> 2:281-283.	
	GI	Doillon et al. (1986), <i>J. Biomed. Mat. Res.</i> 20(8):1219-1228.	
	GJ	Ferruti (1981), "Succinic half-esters of poly(ethylene glycol)s and their benzotriazole and imidazole derivatives as oligomeric drug-binding matrices," <i>Makromol. Chem.</i> 182:2183-2192.	
	GK	Fleisher et al. (1987), "Regeneration of lost attachment apparatus in the dog using polygalactin-910," <i>J. Dent. Res.</i> 281(66 spec.), Abstract No. 1393.	
	GL	Gander et al. (1988), "Crosslinked poly(alkylene oxides) for the preparation of controlled release micromatrices," <i>J. Controlled Release</i> 5:271-283.	
	GM	Gnanou et al. (1984), "Hydrophilic polyurethane networks based on poly(ethylene oxide): Synthesis, characterization, and properties. Potential applications as biomaterials," <i>Macromolecules</i> 17:945-952.	
	GN	Gomel et al. (1992), "Infertility surgery: Microsurgery," <i>Current Opinion in Obstetrics and Gynecology</i> 4:390-399.	
	GO	Inada et al. (1984), "Ester synthesis catalyzed by polyethylene glycol-modified lipase in benzene," <i>Biochem. &amp; Biophys. Res. Comm.</i> 122:845-850.	
	GP	Katre et al. (1987), "Chemical modification of recombinant interleukin 2 by polyethylene glycol increases its potency in the murine meth A sarcoma model," <i>Proc. Natl. Acad. Sci. USA</i> 84:1487-1491.	
	GQ	McPherson et al. (1988), <i>Collagen and Related Research Clinical and Experimental</i> 8(1):83-100.	
	GR	Nathan et al. (1993), "Copolymers of lysine and polyethylene glycol: A new family of functionalized drug carriers," <i>Bioconjugate Chem.</i> 4:54-62.	
	GS	Nishida et al. (1984), "Hypouricaemic effect after oral administration in chickens of polyethylene glycol-modified uricase entrapped in liposomes," <i>J. Pharm. Pharmacol.</i> 36:354-355.	
	GT	Pados et al. (1992), "Adhesions," <i>Current Opinion in Obstetrics and Gynecology</i> 4:421-428.	
	GU	Pagidas et al. (1992), "Effects of ringer's lactate, interceed (TC7) and gore-tex surgical membrane on postsurgical adhesion formation," <i>Fertility and Sterility</i> 57(1):199-201.	
	GV	Pyatak et al. (1980), "Preparation of a polyethylene glycol:superoxide dismutase adduct, and an examination of its blood circulating life and anti-inflammatory activity," <i>Res. Com. Chem. Path. Pharmacol.</i> 29:113-127.	
	GW	Ramshaw et al. (1984), "Precipitation of collagens by polyethylene glycols," <i>Anal. Biochem.</i> 141:361-365.	
	GX	Savoca et al. (1979), "Preparation of a non-immunigenic arginase by the covalent attachment of polyethylene glycol," <i>Biochem. Biophys. Acta.</i> 578:47-53 (1979).	

Examiner Signature		Date Considered	12-30-04
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		Application Number	10/766146
		Filing Date	1/27/2004
		First Named Inventor	Woonza M. RHEE et al.
		Art Unit	1615
		Examiner Name	Casey Rosenthal
Sheet 6 of 6	Attorney Docket Number	2500-2287.06	

OTHER DOCUMENTS — NONPATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), Title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
CR	GY	Sawhney et al. (1994), "Optimization of photopolymerized bioerodible hydrogel properties for adhesion prevention," <i>J. Biomed. Mat. Res.</i> 28:831-838.	
	GZ	Sperinde et al. (1997), "Phase transformation poly(ethylene glycol) hydrogels for tissue engineering and cell therapies," <i>23<sup>rd</sup> Annual Meeting of the Society for Biomaterials</i> , p. 247.	
	HA	Steinleitner et al. (1991), "Poloxamer 407 as an intraperitoneal barrier material for the prevention of postsurgical adhesion formation and reformation in rodent models for reproductive surgery," <i>Obstetrics and Gynecology</i> 77:48-52.	
	HB	Takahashi et al. (1984), "A chemical modification to make horseradish peroxidase soluble and active in benzene," <i>Biochem. &amp; Biophys. Res. Comm.</i> 121:261-265.	
	HC	Tulandi (1991), "Effects of fibrin sealant on tubal anastomosis and adhesion formation," <i>Fertility and Sterility</i> 56(1):136-138.	
	HD	Ulbrich et al. (1986), "Poly(ethylene glycol)s containing enzymatically degradable bonds," <i>Makromol. Chem.</i> 187:1131-1144.	
	HE	Urman et al. (1991), "Effect of hyaluronic acid on postoperative intraperitoneal adhesion formation and reformation in the rat model," <i>Fertility and Sterility</i> 56(3):568-570.	
	HF	Viau et al. (1986), "Safety evaluation of free radical scavengers PEG-catalase and PEG-superoxide dismutase," <i>J. Free Rad. In Bio. &amp; Med.</i> 2:283-288.	
	HG	Viau et al. (1986), "Toxicologic studies of a conjugate of asparaginase and polyethylen glycol in mice, rats and dogs," <i>Am. J. Vet. Res.</i> 47:1398-1401.	
	HH	West et al. (1995), "Comparison of covalently and physically cross-linked polyethylene glycol-based hydrogels for the prevention of postoperative adhesions in a rat model," <i>Biomaterials</i> 16:1153-1156.	
	HI	Wieder et al. (1979), "Some properties of polyethylene glycol: Phenylalanine ammonia-lyase adducts," <i>J. Biol. Chem.</i> 254:12579-12587.	

Examiner Signature		Date Considered	12-30-04
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